AMENDMENTS TO THE CLAIMS

Please accept amended Claims 1, 11 and 12 as follows.

Listing of claims:

1. (Currently Amended) A computer readable medium embodying instructions executable by a processor to perform method of generating a feasible schedule for n jobs given a duration and a revisit time for each job, comprising:

receiving a input data describing the n jobs, the duration, and the revisit time for each of the n jobs;

~~determining from the input data whether it is impossible to generate a feasible schedule;~~

determining from the input data whether a round robin schedule is possible and upon determining that the round robin schedule is not possible performing steps for determining a feasible schedule, wherein determining the feasible schedule comprises,

calculating a theoretical probability for each of the n jobs, wherein the theoretical probability is a probability that a job will be performed next;

calculating an actual probability for each of the n jobs, wherein the actual probability is a relative amount of time that each job is to be performed;

creating a potential schedule for the n jobs based on the theoretical probabilities and the actual probabilities;

searching for the feasible schedule of the n jobs from the potential schedule of the n jobs; and

outputting the feasible schedule wherein the n jobs are scheduled according to the feasible schedule.

2. (Previously Presented) The computer readable medium of claim 1, wherein determining whether it is impossible to generate a feasible schedule comprises determining whether

$$\sum_{i=1}^{n} \frac{\tau_i}{\tau_i + \mu_i} > 1$$ is satisfied, wherein

n is a number of jobs,

τ_i is a duration time, and

μ_i is a revisit time.

3. (Previously Presented) The computer readable medium of claim 1, wherein determining wherein determining whether a round robin schedule is possible comprises determining whether

$$\sum_{i \neq i}^{n} \tau_i \leq u_i$$ is satisfied, wherein

n is a number of jobs,

τ_i is a duration time, and

u_i is a value of a residual vector.

4. (Previously Presented) The computer readable medium of claim 1, wherein calculating theoretical probabilities comprises selecting a theoretical probability

$$z_i \geq \frac{\tau_i}{\tau_i + k \cdot u_i}, \; i = 1, \ldots, n$$, such that $$\sum_{i=1}^{n} \frac{\tau_i}{\tau_i + \mu_i} = 1$$, wherein

τ_i is a duration time,

u_i is a value of a residual vector,

n is a number of jobs, and

μ_i is a revisit time.

5. (Canceled)

6. (Previously Presented) The computer readable medium of claim 4, wherein calculating theoretical probabilities further comprises calculating an array including the theoretical probability for the n jobs.

7. (Canceled)

8. (Previously Presented) The computer readable medium of claim 1, wherein creating a potential schedule based on the theoretical probabilities and the actual probabilities comprises determining a difference between the theoretical probabilities and the actual probabilities for each of the n jobs.

9-10. (Canceled)

11. (Currently Amended) The computer ~~system~~ readable medium of claim 1, wherein the method further includes outputting the round robin schedule for the n jobs upon determining that the round robin schedule is possible.

12. (Currently Amended) The computer ~~system~~ readable medium of claim 8, wherein searching for the feasible schedule of the n jobs from the potential schedule of the n jobs further includes

determining a job number for each of the n jobs ~~that is farthest from a corresponding theoretical probability~~.